

### **REMARKS**

The Office Action mailed March 6, 2006, has been carefully considered. The present Response is intended to be a complete response thereto and to place the case in condition for allowance.

Claims 1-3, 5-14, and 16-20 are pending. Claims 4 and 15 have been cancelled. Claim 20 has been added. Support for the new claim is found, *inter alia*, in the specification in Table I, page 7.

### **THE CLAIMS ARE NOT ANTICIPATED**

Claims 1, 3, 5-9, 14, and 16-19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP 474992 (EP '992). Claims 1, 3, 8-9, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ethington, Jr. et al. (U.S. Patent No. 6,726,941). Claims 1-2, 8-13, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Connell (U.S. Patent No. 6,461,399). Applicant respectfully traverses the rejections.

To anticipate a claim, the reference must teach every element of the claim. *See* MPEP § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

None of the cited references teaches a fertilizer containing about 1-2.5% nitrogen and 0.35% phosphorus. This ratio is critical for the present invention because Applicant has discovered a method to inexpensively, effectively, and significantly lower the phosphorus content of poultry litter, while, at the same time, maintaining the high nitrogen content in the final fertilizer product.

In the Final Office Action, the Examiner alleges that the “nitrogen content and phosphorus content would have been inherent, because raw poultry shows such amounts to present.” *See* Final Office Action, page 2. To show the raw poultry content, the Examiner points to Table 1 of the Specification and a Table entitled Nutrient Content of Fertilizer Materials.

First, the Table relied on by the Examiner shows phosphorus content of poultry litter of 1.3 to 3.0 percent (page 4). These numbers are at least 3.7 times greater than the claimed amount (0.35%). The Table fails to show a phosphorus content of 0.35% at all.

Second, according to MPEP 2112, the “Examiner must provide rationale or evidence tending to show inherency.” To rely on inherency, “the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art.” *Ex parte Levy*, 17 USPQ2d 1461 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Moreover, “extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’” *In re Robertson*, 49 USPQ2d 1949, 1950-1951 (Fed. Cir. 1999) (citations omitted).

The Examiner has failed to show inherency because she has not shown that the nitrogen and phosphorus contents must necessarily flow from the teachings of the cited references. Here, the Examiner alleges that the final nitrogen and phosphorus contents must be the same as the initial nitrogen and phosphorus contents without any reasoning. As a matter of fact, the Examiner's allegation is erroneous, because nitrogen and phosphorus contents of raw poultry litter cannot be equated with those of the final fertilizer product. The nitrogen content of raw poultry litter is in ammonia (hence the mal odor of the raw poultry litter), which will evaporate during processing of the raw litter. As such, the nitrogen content of raw poultry litter cannot be the same as that of the final product after much processing.

To support Applicant's assertion that the initial nitrogen and phosphorus content are not the same in the final fertilizer product and the initial poultry litter, Applicant has submitted two references along with the Pre-Appeal Brief Request for Review filed September 6, 2006, *The Value and Use of Poultry Waste as Fertilizer* by Charles C. Mitchell, Jr. ("Mitchell reference") and *Manure as Fertilizer* by Pete Christensen and Bill Peacock ("Christensen reference"), to show that the nutrient contents of manure products depend on how the raw manure is processed. The Mitchell reference specifically states:

The chemical analysis of either type of manure is highly variable due to several factors. These include moisture, temperature, amount and kind of litter, amount of soil picked up in cleaning a house, the number of batches of broilers fed on the litter, and the conditions under which the manure was stored and handled before spreading.

Mitchell reference, 8<sup>th</sup> paragraph (emphasis added). Likewise, the Christensen reference states:

Actual nutrient content of manures varies depending on source, ..., moisture content, storage, and handling methods.

Christensen reference, 2<sup>nd</sup> paragraph (emphasis added).

In addition, Applicant files herewith a Declaration of Frederic T. Heasley showing that nitrogen content of the raw poultry litter is much higher than that of the final fertilizer product because of ammonia evaporation during processing. This clearly contradicts the Examiner's allegation that the nitrogen content of the raw litter is the same as the nitrogen content of the final fertilizer product.

Therefore, for the noted reasons, the Examiner's allegation that the nitrogen and phosphorus contents of the final processed fertilizer is the same as those of the raw poultry litter is erroneous and without support. Accordingly, Applicant requests withdrawal of the rejections.

#### THE CLAIMS ARE NOT OBVIOUS

Claims 1-3, 5-7, 14, and 16-18 stand rejected under 35 U.S.C. §103(a) as being obvious over Kazemdeh (U.S. Patent No. 5,772,721). Claims 3, 5-7, 14, and 16-18 stand rejected under 35 U.S.C. §103(a) as being obvious over Connell in view of Staples (U.S. Patent No. 5,730,772, and further in view of Cook (U.S. Patent No. 2,597,457), Doughty (U.S. Patent No. 462,476) and Thomas et al. (U.S. Patent No. 4,405,354). Applicant respectfully traverses the rejections.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP 2143.

Kazemdeh fails to disclose that the fertilizer contains about 1-2.5% nitrogen and 0.35% phosphorus. The Examiner alleges that "it would have been obvious to one of ordinary skill in

the art to follow the teachings of this reference and combine the lignosulfonate binder, the lime stone, and poultry waste,” but fails to provide any motivation for modifying Kazemdeh to arrive at the present invention. According to MPEP 2142, “the initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done.” Further, “it is the duty of the examiner to explain why the combination of the teaching is proper ... A statement of a rejection ... must explain with reasonable specificity at least one rejection, otherwise, the examiner procedurally fails to establish a *prima facie* case of obviousness.” MPEP 2142. Here, because Examiner has failed to provide any suggestion or motivation to arrive at the present invention, she has not met her burden to establish a *prima facie* case of obviousness.

In addition, Applicant respectfully submits that there is no motivation to modify the teaching of Kazemdeh to arrive at the present invention, because Kazemdeh teaches away from the present invention. As stated above, the goal of the present invention is to retain valuable nitrogen in poultry litter, while significantly lowering the phosphorus level (see page 3, second full paragraph, of the specification; and TABLE 1). In column 7, lines 1-2, Kazemdeh teaches the desirability of increasing the phosphorus in the final fertilizer pellet. This teaching is clearly directly contrary to the goal of the present invention. By adding phosphate, a low phosphate content of about 0.35% cannot be achieved from poultry litter. In the Declaration filed herewith, Mr. Heasley clearly points out that any addition of phosphorus to the raw poultry litter during processing cannot result in a phosphorus content of 0.35% which is much lower than the phosphorus content of the raw litter in the first place. Therefore, one of ordinary skill in the art, reading the disclosure of Kazemdeh, would not have modified the teaching of Kazemdeh to arrive at the present invention. Accordingly, Kazemdeh cannot render the present invention obvious.

With regard to the rejection over Connell in view of Staples, and further in view of Cook, Doughty, and Thomas et al., the references, taken alone or in combination, fail to disclose that the fertilizer contains about 0.35% phosphorus. Nevertheless, the Examiner alleges “to optimize amounts of these additives so as to obtain a final phosphorus content of about 0.35% would have been well within the realm of ordinary skill” (see page 6 of the Final Office Action). The Examiner’s reasoning is based on Connell’s disclosure on column 4, line 66 to column 5, line 6; however, this reasoning is erroneous. According to Connell, soil deficiencies and crop nutrient needs can be determined. However, the current inventive fertilizer having 0.35% phosphorus is not based on soil deficiencies or crop nutrient needs, but on environmental considerations. If one is to assess only soil deficiencies and nutrient needs, it would be desirable to increase phosphorus content, as phosphorus improves plant growth, which is inapposite to the present invention. This is also noted in the Declaration filed herewith, where Mr. Heasley clearly points out that the addition of phosphorus is always desirable when considering soil deficiencies or crop nutrient needs.

Moreover, the 0.35% phosphorus is much lower than that of the raw poultry litter. On the other hand, Connell, like Kazemdeh, teaches augmenting the phosphorus content of the fertilizer (see Amendment filed December 23, 2005, pages 8-9), which clearly teaches away from the present invention. By teaching away from the present invention, it is clear that there is no motivation to combine the references to arrive at the present invention

In the Final Office Action, the Examiner alleges that the teaching of augmenting phosphorus content “is a mere recognition of something any practitioner who is working with poultry litter would have done” (Final Office Action, page 7). This clearly contradicts the Examiner’s allegation that it would have been obvious for one of ordinary skill in the art to lower

the phosphorus content in the final product (note that a 0.35% phosphorus content is not possible without lowering the phosphorus content of the raw litter).

This lack of motivation is clear when one contrasts the disclosure of the prior art with that of the present invention. The main consideration of the prior art is soil deficiencies or crop nutrient needs, which invariably requires the addition of nutrients, including phosphorus. On the other hand, the primary consideration of the present invention is environment effect, which requires the minimization of phosphorus. As such, the prior art teaches augmentation of phosphorus while the present invention relates to the reduction of phosphorus. Because the prior art is concerned with soil deficiencies and crop nutrient needs, it is always desirable to add rather than remove phosphate. Therefore, by reading the prior art one of ordinary skill in the art would have no motivation to lower the phosphorus content of poultry litter to 0.35%. Accordingly, the combination of Connell, Staples, Cook, Doughty, and Thomas et al. cannot render the present invention obvious within the meaning of 35 U.S.C. §103.

## CONCLUSION

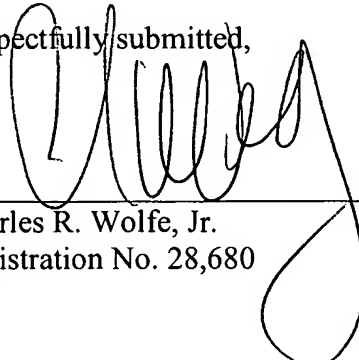
Applicant has responded to the Office Action mailed March 6, 2006. A Petition for a three-month extension of time, a Request for Continued Examination, a Declaration of Federic T. Heasley, and fees therefor are filed herewith. All pending claims are now believed to be allowable and favorable action is respectfully requested.

In the event that there are any questions relating to this Amendment or to the application in general, it would be appreciated if the examiner would telephone the undersigned attorney concerning such questions so that the prosecution of this application may be expedited.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185 (119544-00101). In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, applicant hereby petitions under 37 C.F.R. 1.136(a) for an extension of time for as many months as are required to render this submission timely.

Any fees due are authorized above.

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